Weekly Summary Report
USEPA Oversight, Sauget Area 2, Sauget, IL
WA No. 224-RXBF-05XX / Contract No. 68-W6-0025

Week Ending Friday, December 10, 2004

This report summarizes the Interim Remedial Action (IRA) work conducted by Solutia and its contractors from December 4 through December 10, 2004 at Site R, Sauget Area 2. The current IRA fieldwork consists of slurry stabilization and stormwater management.

Contractors Onsite

Inquip Associates Inc. (barrier wall construction contractor)
URS (primary consultant for Solutia)

Work Performed This Week

Slurry stabilization activities continued during the week. Ground saturation from recent rainfall events prohibited site grading activities this week. Slurry stabilization, site grading, construction of the barrier wall cap, and demobilization of equipment will continue as the primary activities at the site during the upcoming weeks.

Groundwater Migration Control System (GMCS)

The river elevation decreased slightly during the week, from approximately 393.7 feet above mean sea level (amsl) on December 3 to 391.6 feet amsl on December 10. During the week, the GMCS pumping rate was adjusted in an effort to maintain a zero or inward gradient across the barrier wall at each of four piezometer pairs. To accomplish this, the combined GMCS pumping rate was increased from approximately 510 to 1,100 gallons per minute (gpm) on December 5, with the centrally-located extraction well EW-2 pumping roughly 520 gpm, and the north and south extraction wells, EW-1 and EW-3, pumping roughly 230 and 320 gpm, respectively. On December 7, the combined pumping rate was decreased to approximately 300 gpm, with all three extraction wells pumping roughly 100 gpm. By the end of the reporting period (December 10), the combined pumping rate, consisting entirely of pumping at EW-1, was less than 30 gpm.

Eight barrier wall piezometers, with four inside and four outside the barrier wall alignment, monitored the groundwater elevations adjacent to the barrier wall alignment during the week. Table 1 shows the river and piezometer water elevations measured on December 10, 2004 (3:00 PM). The barrier wall construction was completed on November 8, 2004.

ROD performance metrics (gradient across the barrier wall)

The four piezometer pairs each showed an inward gradient across the barrier wall throughout the reporting period, with the inside piezometers recording water levels between 1 and 6 feet lower than the piezometers located outside the barrier wall.

FFS performance metrics (gradient between inside wall piezometers and river)

When compared to the Mississippi River water level, the four piezometers located inside the barrier wall each showed an inward gradient, toward Site R, throughout the reporting period. The inside piezometers recorded water levels between roughly 2 and 6 feet lower than the river elevation throughout the week.

TABLE 1
River and Piezometer Water Elevations – December 10, 2004 (15:00)

	Elevation (ft above mean sea level)
River Level	391.64
Piezometer 1S – inside wall (northern-most pair)	390.39
Piezometer 1N – outside wall (northern-most pair)	394.29
Piezometer 2E – inside wall (north-central pair)	392.07
Piezometer 2W – outside wall (north-central pair)	395.55
Piezometer 3E – inside wall (south-central pair)	391.60
Piezometer 3W – outside wall (south-central pair)	394.79
Piezometer 4E – inside wall (southern-most pair)	391.64
Piezometer 4W – outside wall (southern-most pair)	393.94

Barrier Wall Cap Construction

During the reporting period, barrier wall cap construction proceeded from station 26+00 northward to station 31+50, near the corner formed by the main section and northern leg of the barrier wall alignment.

Slurry

To stabilize slurry, cement was added to new cells located along the perimeter of the spoils stockpile at Site R. Six perimeter cells have now been stabilized. Additionally, slurry in the containment berms, located north of the spoils stockpile, was monitored and stirred by a trackhoe.

The central portion of the spoils stockpile has not yet been stabilized because the spoils have become saturated from recent rainfall events. This material is being graded to promote drainage toward the northwest portion of the spoils stockpile, where accumulated water will be pumped into the nearby modutanks. Once the spoils have been reworked, slurry will be pumped into the central portion of the spoils stockpile and stabilized in a similar fashion as the perimeter cells that have already been completed.

Stormwater

Significant rain during the early part of the week caused pooling of stormwater on site. Stormwater was collected from localized areas on site and pumped to the modutanks. As necessary, stormwater was flocculated and discharged to the American Bottoms Regional Treatment Facility (ABRTF).

Other Activities

Inquip continued to decontaminate and demobilize construction equipment on site during the week.